based on geographic point of origin.

- that margins are on the order of \$0.04 per minute, reflecting a price-cost margin of 40 percent using his numbers. This is implausible. First, he fails to explain why margins of this magnitude -- if actually realized -- would fail to attract significant entry from the many potential entrants other than BellSouth into long distance services. Because all of the essential inputs for entering long distance service are available in competitive markets, the entry barriers are quite low. This is inconsistent with earning margins of 40 percent, suggesting instead that Professor Schmalensee's estimates are too high.
- 156. Second, his estimates are based on improper assumptions. First, conservative estimates of network costs are in the range of \$0.01-\$0.02 per minute. In addition to these, the long distance firm must cover access charges of approximately \$0.05 per minute¹²² and

¹²¹ See Declaration of Richard L. Schmalensee on Behalf of BellSouth, note 6, supra, page 16. It is worth noting that less than a year ago, Professor Schmalensee estimated that these margins were 80 percent, which is even more implausible (see Affidavit of Richard L. Schmalensee on Behalf of BellSouth, in the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-region, interLATA Services in South Carolina, Before the Federal Communications Commission (October 1997), refiled in the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-region, InterLATA Services in Louisiana, Before the Federal Communications Commission (November 1997)).

¹²² See Trends in Telephone Service, Federal Communications Commission, July 1998, Table 1.2.

retail-level and overhead costs that are likely to be in the range of \$0.04-\$0.06 per minute. 123

This suggests that long distance operating costs are in the range of \$0.10 to \$0.13 per minute, before accounting for taxes and a normal return on invested capital. 124 Assuming Professor Schmalensee is correct that AT&T's ARMP of \$0.14 per minute is correct, 125 revised cost estimates reduce pre-tax margins to 18 percent -- far below the 40 percent margins hypothesized by Professor Schmalensee.

B. BellSouth's Position as a Competitor

157. We agree with Professor Schmalensee that BellSouth is a formidable potential

¹²³ For AT&T, non-network, non-access costs have increased as a share of revenues since 1988 from 25 percent to 32 percent in 1994 -- remaining approximately constant at \$0.058 per minute (see Exhibit 10).

Professor Schmalensee argues that \$0.10 per minute represents an upper bound on the costs of providing long distance service, citing as evidence an affidavit by Robert Hall (on behalf of MCI), in which reported a price of about ten cents per minute charged by low cost resellers (see Declaration of Richard L. Schmalensee on Behalf of BellSouth, note 6, supra, page 15). This is not correct. The lowest current retail price available provides only a noisy indicator of the economic costs of providing long distance telephone service; retail prices from certain carriers may be less than the long-run economic costs of providing service. For example, new entrants may be pricing below long-run economic costs in order to capture market share. Moreover, resellers may be able to take advantage of wholesale prices that are below long-run costs because of excess capacity for both network transport and billing services. Competition in long distance markets assures that the benefits of these wholesale bargains are passed through to consumers in terms of lower prices. Finally, service providers may have lower costs because they focus on specific niches (e.g., because they do not serve low-volume residential customers such as those that comprise the bulk of AT&T's customer base).

According to the FCC, the average revenue per minute for all domestic switched long distance services was \$0.126 in 1996 (see *Trends in Telephone Service*, Federal Communications Commission, July 1998, Table 13.5).

competitor in the interexchange market. However, as we noted earlier, BellSouth's monopoly power in local service raises the specter of monopoly leveraging; at the present time, no other firm is in a position to offer one-stop shopping to residential customers.

C. ILEC Entry Into the InterLATA Toll Market Combined With Above-Average Access Rates Would Harm Competition

threat to competition in the long distance market because an ILEC with a long distance subsidiary would never find it advantageous to use its excess access charge revenues to subsidize anticompetitive pricing by its long distance subsidiary. His critique focuses on what he terms a "simple" and a "subtle" version of a vertical price squeeze. In the simple version, the ILEC earns more money by selling over-priced access to competing long distance carriers than by capturing those customers for itself, using prices that are below the costs of its long distance competitors. In the subtle version (attributed to Professor Franklin Fisher), the opportunity to stimulate additional excess access revenues by lowering long distance profits may be profitable for the ILEC, but even in this case, Professor Schmalensee argues that total welfare is likely to increase because of the lower long distance prices.

See Declaration of Richard L. Schmalensee on Behalf of BellSouth, note 6, supra, pages 26-31. In the traditional version of a vertical price squeeze, a vertically-integrated firm with a bottleneck monopoly on an essential upstream input takes advantage of an above-cost price on the bottleneck facility to subsidize prices for the downstream product that are below the costs of competing non-integrated downstream firms. In the present context, the relevant bottleneck facilities are the local access services controlled by BellSouth, whereas the downstream market is for long distance telephone services.

the most important motivation for anticompetitive behavior by the ILEC, namely, to preserve its monopoly power (and retain the excess access revenues) over local services. Moreover, his arguments are inconsistent because in the simple case, there is no value to being vertically integrated. If the case were as presented by Professor Schmalensee, the ILEC would have no incentive to compete against competitive long distance carriers, preferring instead to earn monopoly profits in the form of excess access revenues as described in his example. ¹²⁷ In the more subtle model, Professor Schmalensee's claim that total welfare increases depends on one's acceptance of both his specialized model and his assessment of what constitutes "reasonable assumptions." His model does not address incentives of the ILEC to preserve its upstream monopoly by behaving anticompetitively in downstream markets, and therefore, does not apply to the current circumstances.

VIII. RESPONSE TO CLAIMS OF THE WEFA GROUP

160. The WEFA Group has prepared an estimate of the consumer benefits from interLATA entry by BellSouth, based on the WEFA B econometric model of the economy. 129

When based upon appropriate assumptions, such econometric models are capable of generating

See Declaration of Richard L. Schmalensee on Behalf of BellSouth, note 6, supra, pages 27-29.

¹²⁸ Declaration of Richard L. Schmalensee on Behalf of BellSouth, note 6, supra, page 30.

¹²⁹ The WEFA Group, The Economic Impact of BellSouth's Entry Into the interLATA Long Distance Markets in Louisiana, March 1997.

useful insight into how changes in one industrial sector can have effects which propagate throughout the economy. Because telecommunications services are an essential input to virtually every productive activity in the economy, reduction in telecommunications prices generate large gains in economic well-being. Had the WEFA model been run with the assumption that local rates would fall by a similar amount as they assume toll rates would fall, the estimated benefits to Louisiana consumers would be significantly larger. Conversely, if lower toll rates come at the expense of higher relative local rates (because competition is delayed), then the overall effect on Louisiana's economy would range from zero to a large negative impact depending upon the input assumptions.

- 161. Therefore, the WEFA findings are and can be no better than the assumptions employed in the scenarios. Unfortunately, the WEFA report is not based on appropriate assumptions regarding either the base case or the "BellSouth-entry" scenario. For example, WEFA assumes that BellSouth entry will result in a further decline in long-run prices for long distance service of 25 percent (*i.e.*, in addition to what would occur otherwise under the base case scenario). Because long distance prices already approximate economic costs, this assumption is incorrect. Consequently, the WEFA results shed no light on the issue of BellSouth entry on consumers' well-being.
- 162. Furthermore, although the WEFA report did not adequately describe the assumptions included in the base case scenario (i.e., in which BellSouth is not allowed to enter long distance services at this time), this scenario is likely extremely conservative regarding its

forecasts about the improvements in productivity and prices which can be expected in toll markets in the absence of interLATA relief. As a result, the WEFA study attributes far more credit to BellSouth's entry than is warranted. For example, the study assumes a dramatic increase in productivity growth of two percent per year due to interLATA relief, supporting this with ad hoc references to the trade press. Moreover, this assumption seems to be a common one for WEFA because they used the same assumption to estimate benefits of relaxing the MFJ line-of-business restriction on the BOCs in 1994¹³⁰ and again to estimate the benefits of interLATA relief in 1995.¹³¹ Much of WEFA's justification for this assumption in its 1994 study disappeared once the line-of-business restrictions were relaxed, yet WEFA has not adjusted its scenarios to reflect these and other important changes to the base case scenario.

VIII. SUMMARY AND CONCLUSIONS

163. The Telecommunications Act of 1996 is a landmark attempt to promote competition in all telecommunications markets. Recognizing the current state of local

¹³⁰ See WEFA Group, Economic Impact of Eliminating Line-of-Business Restrictions on the Bell Companies, Bala Cynwyd, Pennsylvania, July 1994, page 14. Although the report was issued after the information services restriction was eliminated, it specifically noted (page 7) that the "recently granted information services relief is not reflected in the Baseline forecast."

¹³¹ See WEFA Group, Economic Impact of Deregulating U.S. Communications Industries, Bala Cynwyd, Pennsylvania, February 1995. For a critique of the WEFA analysis which applies as well to the most recent study, see R. Glenn Hubbard, Economic Impact of Entry into Long Distance Markets by Bell Companies: Response to the WEFA Study, Mimeograph, Columbia University, May 1995.

exchange competition, the Act contains broad instructions to promote competition in local markets and to deregulate. Around the country, state commissions are engaged in arbitrations to broker agreements between BOCs and entering competitors to ensure progress in local exchange Competition. For purposes of this proceeding, the Act also addresses competition in long distance markets. In particular, Section 271 of the Act seeks to identify and achieve criteria for the removal of restrictions against participation by BOCs in interLATA markets.

- 164. This affidavit addresses the following question: From an economic perspective, what are the appropriate preconditions under which interLATA relief for BellSouth will be in the public interest? To answer this question, one must analyze two related sets of issues. The first set investigates and compares the current state of competition in markets for long distance services and markets for local exchange services. The second set investigates and compares potential gains and losses to consumers from interLATA relief for BellSouth and other BOCs.
- 165. We address both sets of issues, with a goal of informing the Commission of the economic principles that should guide the decision to grant or deny BellSouth the right to compete in interLATA markets. Two themes guide the analysis. First, while the removal of regulatory entry barriers is generally pro-competitive, premature interLATA relief is likely to be anticompetitive by raising local exchange entry barriers and threatening existing long distance competition. Second, the Commission should protect the process of competition, not competitors; premature removal of the long distance entry barrier would harm the process of competition while protecting BellSouth.

- 166. The principal conclusions of our affidavit are two:
 - i. Long distance markets in general are already effectively competitive. Admitting BellSouth and other BOCs as additional competitors will contribute little to long distance competition, and as long as they continue to control local monopolies, will likely harm competition in local exchange markets as well as the long distance market. Nothing in the submissions by BellSouth's affiants Jerry Hausman, Richard Schmalensee, Richard Gilbert, D. John Roberts, Glenn A. Woroch, Aniruddha Banerjee, William C. Denk, or the WEFA Group in this proceeding causes us to alter this observation.
 - Anticompetitive behavior by BOCs is unlikely to be restrained in the short-run by market-based competition. Further, regulatory restraint alone will be an inadequate safeguard against subtle anticompetitive practices. Permitting interLATA relief for the BOCs prior to there being effective local exchange competition enhances both the incentive and opportunity to engage in a range of anticompetitive practices. Given these points, our conclusion is that interLATA relief for BellSouth should be postponed until the success of effective local exchange competition is assured. In the near term, entry by BellSouth is likely to

impede competition in both local exchange and long distance markets, reducing gains for consumers and frustrating the competitive intent of the Telecommunications Act of 1996.

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FCC DOCKET CC NO. 98-121 AFFIDAVIT OF R. GLENN HUBBARD

I declare under penalty of perjury that the foregoing is true and correct. Executed on July <u>26</u>, 1998.

R Glenn Hubbard

Sworn to and subscribed to before me

this 26 day of July, 1998

Notary Public

PAULA PURCELL
Notary Public - State of Florida
by Commission Expires Nov 12, 2001
Commission # CC695893

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FCC DOCKET CC NO 98-121 AFFIDAVIT OF WILLIAM H. LEHR

I declare under penalty of perjury that the foregoing is true and correct. Executed on July 23, 1998.

William H. Lehr

Sworn to and subscribed to before me

This 23rd day of July, 1998

Notary Public un Commission expres May 15, 2003

EXHIBITS 1 - 10

EXHIBIT 1: TELECOMMUNICATIONS ACT OF 1996: IMPLEMENTATION STATUS

As of July 1998 ...

States that have completed implementation of Telecommunications Act of 1996?	None.
States that have implemented reformed competitively-neutral universal service mechanism?	None.
States where intrastate or interstate access charges equal economic costs?	None.
States that have adopted permanent prices for UNEs?	Only 21 of 50 states have adopted permanent UNE prices (DE, NJ, PA, WI, NH, NY, FL, KY, MO, CO, TX, MI, GA, LA, CT, MA, AZ, WA, MD, SC, IA). • 7 of these are in Bell Atlantic/NYNEX territory (DE, MA, NJ, PA, NH, NY, MD) ¹ • Only 2 states with permanent rates for GTE (FL, MO)
States where electronic interfaces are non-discriminatory and operationally ready?	None. In no state have ILECs completed implementation of non-discriminatory and operationally-ready electronic interfaces to permit easy transfer of customers from ILEC to CLEC.
Regions where AT&T arbitration with BOCs (and GTE) on-going?	Every region of U.S.

 $^{^{\}rm 1}$ Approval of the acquisition of NYNEX by Bell Atlantic was conditioned, in part, on compliance with the Telecommunications Act of 1996.

EXHIBIT 2: COMPOSITION OF THE LONG DISTANCE INDUSTRY, 19942

Tier by Annual Toll Revenue	Facilities-based	Resellers	Total	Share Toll Revenue (%)
Tier 1A: > \$5B	3	0	3	80%
Tier 1B: \$1B-\$5B	2	0	2	6%
Tier 2: \$100M-\$1B	9	1	10	3%
Tier 3: \$15M-\$100M	73	57	130	8%
Tier 4: \$5M-\$15M	120	128	248	3%
Tier 5: <\$5M	196	270	466	<1%
Total	403	456	859	100%

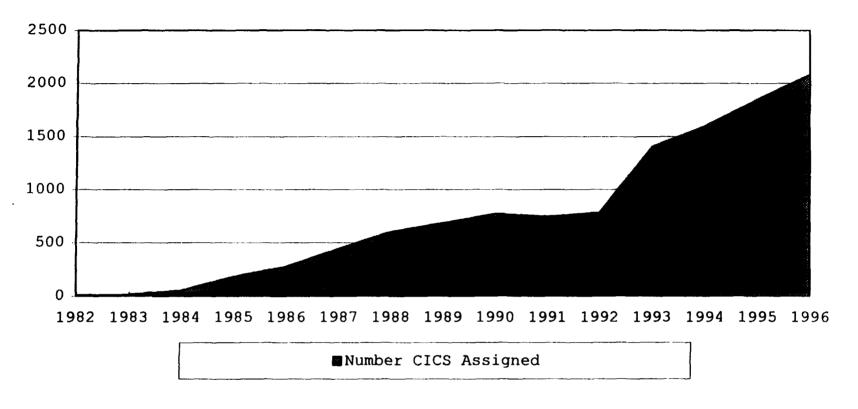
² Source: Salomon Brothers, U.S. Telecom Services, April 17, 1996, page 19.

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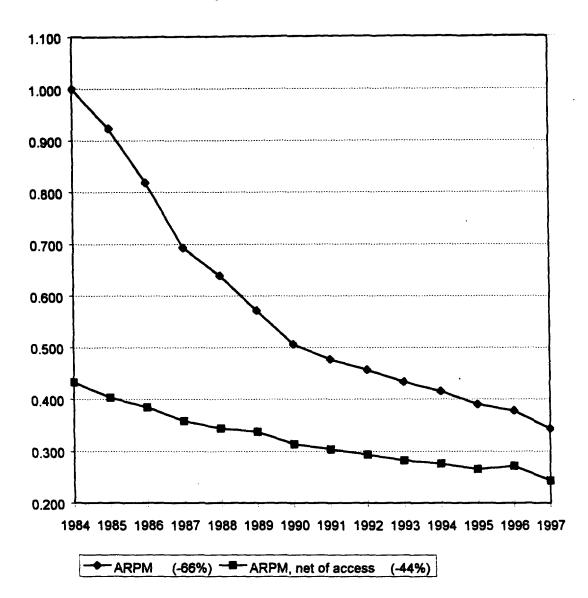
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EXHIBIT 3: CARRIER IDENTIFICATION CODES ASSIGNED3



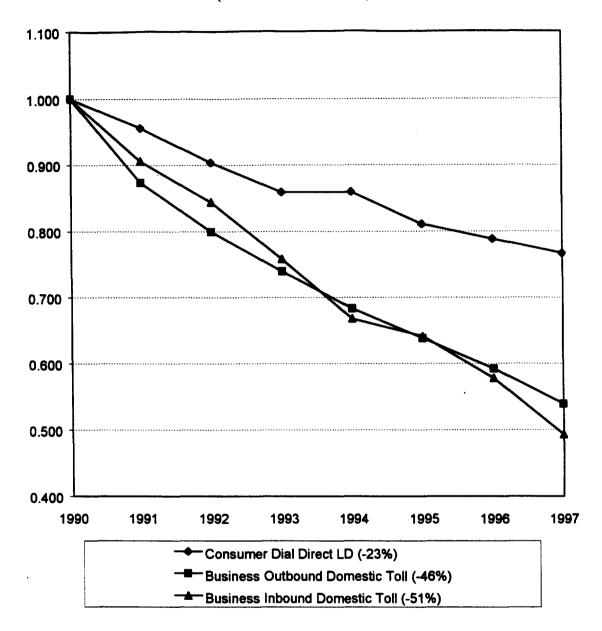
³ Source: Federal Communications Commission, Statistics of Communication Common Carriers, 1995/1996 Edition, Table 8.13.

EXHIBIT 4: AT&T PRICING -- REAL GROWTH IN SWITCHED INTERSTATE TOLL SERVICE (ARPM Index 1984 = 100)⁴



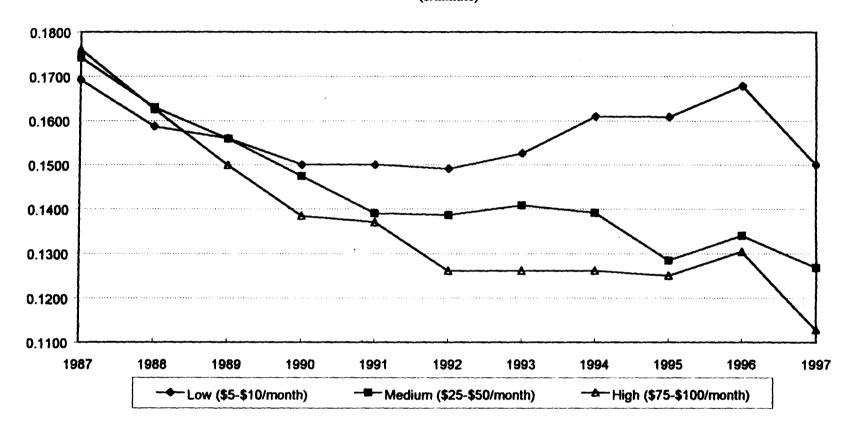
⁴ Price indices for Average Revenue Per Minute (ARPM) and ARPM net of access are based on proprietary AT&T data for all switched interstate services. The nominal price data were converted to a constant 1984 dollars using the implicit GDP deflator reported by the Bureau of Economic Analysis in the Survey of Current Business, August 1997, Table 3. The data for 1997 is through the 3Q97 (Table 7.1).

EXHIBIT 5: TREND IN REAL PRICE OF SWITCHED SERVICES, AT&T (ARPM Index 1990 = 100)⁵



Price indices for Average Revenue Per Minute (ARPM) for Consumer Dial Direct Long Distance, Business Outbound for Domestic Toll and Business Inbound for Domestic Toll are based on proprietary AT&T data. The nominal price data were converted to constant 1990 dollars using the implicit GDP deflator reported by the Bureau of Economic Analysis in the Survey of Current Business, August 1997, Table 3.

EXHIBIT 6: TRENDS IN DIAL-1 OFFER PRICES BY USAGE CATEGORY, AT&T (\$\frac{1}{2}\text{minute}\)



⁶ Prices are best offer prices by AT&T to customers in each monthly usage category. This chart was prepared by AT&T, December 1997.

EXHIBIT 7: STATUS AND IMPACT OF LOCAL COMPETITION ON BELL OPERATING COMPANIES

Ameritech	Status: In Michigan, Ameritech provides 99.6 percent of total access lines, and 99.85 percent of residential access lines.
	Negligible impact: However, "Ameritech extended its record of double-digit profit growth to five consecutive years4.3% annual increase in access lines to 20.5 million"
Bell	Status: Competitors have captured less than 0.7% of Bell Atlantic's access lines: "Bell Atlantic ended
Atlantic	the year providing approximately 235,000 resold access lines and 37,000 unbundled loops to other carriers, demonstrating the company's commitments to opening markets." (italics added). iii
	Negligible impact: However, "1997 was Bell Atlantic's third consecutive year of double-digit earnings growth Access lines in service grew 3.7 percent and totaled 40.6 million."
BellSouth	Status: BellSouth has lost only 0.6% of its customers to local service competitors.
	Negligible impact: However, "For the fourth year in a row, BellSouth set a record for the number of new access linesThe 4.8 percent annual growth in total access lines is the highest for any calendar year in the company's history."
SBC	Status: SBC reports competition capturing less than 2% of its access lines in its 7 state region. VII
	Negligible impact: However, "access lines at SBC grew 5 percent in the fourth quarter of 1997" and "strong line growth was achieved in spite of competition."
US WEST	Negligible impact: US WEST "reported another quarter of strong earnings growthaccess line growth rate of 4.6 percentlocal service revenue growth was 6.4 percent, with almost half the growth driven by the sales of vertical services."

¹ See Ameritech's November 12, 1996, Informational Filing in Michigan Public Service Commission Docket No. U-11104.

[&]quot;See "Ameritech Earnings Per Share Up 12% in Fourth Quarter and Year, Before One-Time Items; Fifth Consecutive Year of Double-Digit Growth," Ameritech press release, January 13, 1998.

iii See "Bell Atlantic Announces Third Consecutive Year of Double-Digit Earnings Growth," Bell Atlantic press release, January 22, 1998.

iv See Bell Atlantic press release, note iii supra:

This is based on the following: "BellSouth President and CEO Jere Drummond told CompTel that his firm has lost 130,000 customers throughout its territory to new local-service competitors" (see Competitive Local Exchange Carriers - Industry Report, Scott, W.T., et al of Furman Selz LLC, October 21, 1997); and BellSouth had 23.2 million access lines at the end of 1997 (see "Fourth Quarter Earnings Preliminary Report," BellSouth press release, January 22, 1998).

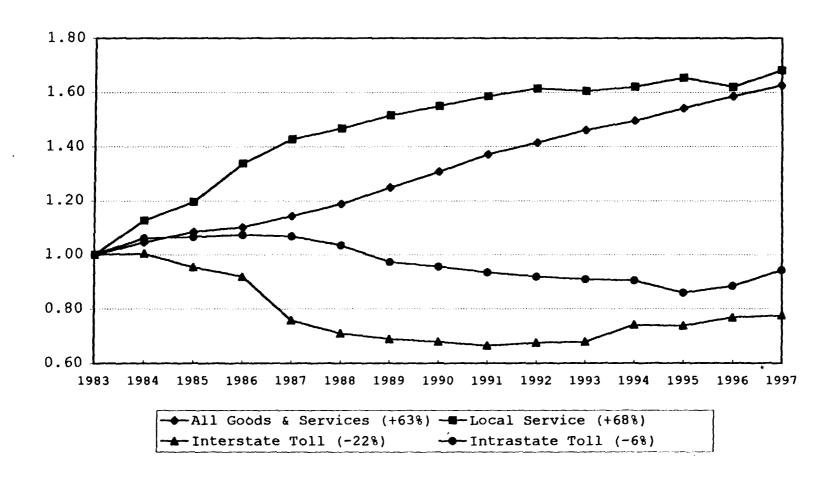
vi See "BellSouth Reports Fifth Consecutive Year of Earnings Growth Increase in access lines sets fourth annual record in row; Wireless customers worldwide surpass 6 million," BellSouth press release, January 22, 1998.

vii SBC reported losing "over 540,000 lines to local competitors" in its seven state region, which is 1.6% of SBC's 33 million access lines. For the data on lines lost, see Affidavit of Royce Caldwell on behalf of SBC Communications in the Matter of SBC Communications v. Federal Communications Commission, In the United States District Court for the Northern District of Texas, Civil Action No. 7-97CV-163X, January 6, 1998; for the number of access lines, see "SBC Communications Continues To Achieve Strong Growth In Access Lines And Wireless Subscriptions," SBC press release, January 13, 1998.

viii See SBC press release, note vii, supra.

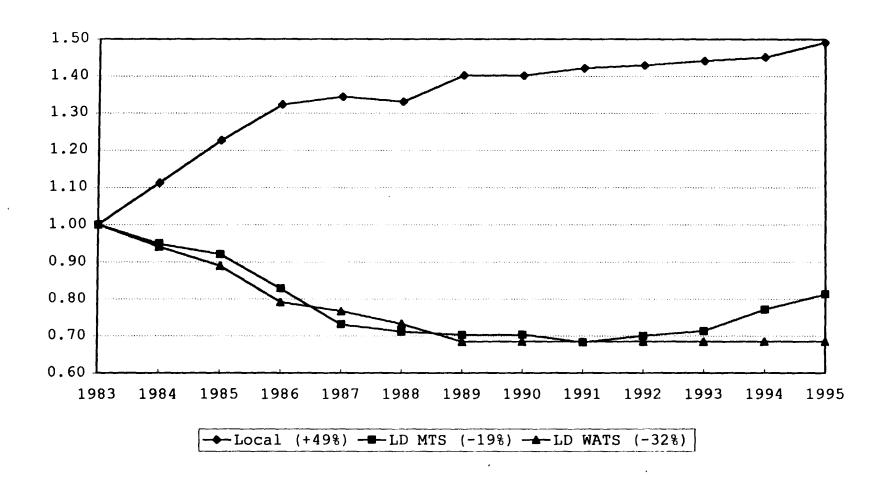
^{&#}x27;s See "U S WEST Communications Reports Earnings Per Share Gain of 6.6 Percent," US WEST press release, July 25, 1997.

EXHIBIT 8A: TELECOMMUNICATIONS CONSUMER PRICE INDICES7



⁷ Consumer Price Indices (CPI) for April of each year. Source: Federal-State Joint Board, Monitoring Report, CC Docket No. 87-339, May 1997, Table 5.5.

EXHIBIT 8B: TELECOMMUNICATIONS PRODUCER PRICE INDICES



⁸ PPI Index in 1983=100. Source: Federal-State Joint Board, *Monitoring Report*, CC Docket No. 87-339, May 1997, Table 5.6. Price indices are for July of each year. This series was discontinued in July 1995.

EXHIBIT 9: EVIDENCE OF CLEC INVESTMENT TO ENTER LOCAL EXCHANGE SERVICES

	Gross Revenue ⁹ (\$ Millions)	Fiber Investment ¹⁰ (\$ Millions)	Fiber Miles ¹⁰ (000s)	Other Data
Local Exchange Carriers	\$107,905	\$7,838.1	10,837.3	1,301,744 miles of copper ¹⁰ \$228.3 billion TPIS ¹¹
Competitive Access Providers	\$ 1,011	\$ 759.8	1,312.9	22,898 buildings served ¹⁰
Interexchange Carriers	\$ 79,057	NA	2,949.6	\$ 55.4 billion TPIS ¹¹

⁹ Gross revenue for 1996. The data for the Competitive Access Providers includes Competitive Local Exchange Carriers. See Table 8.18 in Statistics of Communications Common Carriers 1996/1997, Federal Communications Commission, December 1997.

¹⁰ See Fiber Deployment Update: End of Year 1996, Jonathan Krausharr, Industry Analysis Division, Federal Communications Commission, December 1997. The data for the local exchange companies includes only the Bell Operating Companies and is reported in Tables 6 and 9. The data for the Competitive Access Providers is in Tables 14 and 15. The data for the Interexchange Carriers is in Table 2.

TPIS is Total Plant in Service as of December 31, 1996. TPIS for Regional Bell Operating Companies is from Table 2.7 and for Interexchange Carriers is from Table 2.1 of the Statistics of Communication Common Carriers 1996/1997, Federal Communications Commission, Washington, DC., December 1997.

EXHIBIT 10: INCOME STATEMENT ACCOUNTS FOR AT&T, 1988-1994

(\$ per switched conversation minute)¹²

	(3 bci 24	HUHEU COMYC	I SALIVII IIIIII	uic <i>)</i>				
Acct#		1988	1989	1990	1991	1992	1993	1994
	Share LD revenue switched ¹³	86%	88%	88%	89%	89%	90%	90%
	LD Revenue (excl private) ¹⁴	0.239	0.221	0.205	0.198	0.192	0.187	0.181
5300	Uncollectibles	0.005	0.006	0.005	0.006	0.007	0.006	0.005
	Total Plant Specific Operations	0.024	0.019	0.018	0.018	0.013	0.013	0.012
	Other non-plant specific ¹⁵	0.012	0.011	0.010	0.007	0.009	0.008	0.008
6540	Access	0.113	0.092	0.085	0.079	0.074	0.070	0.065
6560	Depn and Amortization	0.016	0.019	0.017	0.018	0.012	0.012	0.013
690	Total Non-specific Plant Opns	0.141	0.121	0.112	0.104	0.095	0.090	0.086
700	Total Customer Operations	0.034	0.034	0.032	0.032	0.031	0.034	0.034
710	Total Corporate Operations	0.020	0.020	0.018	0.021	0.029	0.026	0.019
	% of sw	itched long d	listance revo	enue				
Acct #		1988	1989	1990	1991	1992	1993	1994
	LD Revenue (excl private)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
5300	Uncollectibles	2.0%	2.5%	2.5%	3.2%	3.7%	3.1%	3.0%
650	Total Plant Specific Operations	10.0%	8.6%	8.6%	9.2%	6.7%	7.0%	6.5%
6540	Access	47.4%	41.4%	41.4%	40.1%	38.7%	37.6%	35.9%
6560	Depn and Amortization	6.5%	8.5%	8.5%	8.9%	6.2%	6.2%	7.2%
700	Total Customer Operations	14.3%	15.5%	15.5%	16.4%	16.2%	18.4%	18.6%
710	Total Corporate Operations	8.5%	8.9%	8.9%	10.4%	15.2%	14.1%	10.4%

Source: Statistics of Communications Common Carriers, Federal Communications Commission, 1988-1994, Table 2.9. The measure of switched Conversation Minutes of Use (CMOU) is based on proprietary data provided by AT&T for all interstate and intrastate services. Costs per minute are based on the share of long distance revenue switched times the appropriate expenditure category divided by the CMOU.

The share of long distance revenue switched equals long distance revenue (excluding private) divided by LD network service revenues. Long distance revenue (excluding private) is the estimate of switched long distance revenue (=Acct 525 - Acct 5120).

Long distance revenue (excluding private) is estimate of switched long distance revenue (=Acct 525 - Acct 5120).

¹⁵ Other non-plant specific costs are given by Acct 690 - Acct 6540 - Acct 6560.

ATTACHMENT 1